A History of Louisiana Casinghead Gas Venting and Flaring: Patching together Incomplete Regulatory Records, 1930s–1970s

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ABSTRACT

The largest natural gas wastage in 20th century U.S. fields was that of casinghead gas, the wet natural gas associated with oil wells. Limited regulations, little market for associated gas, and lack of pipelines resulted in widespread venting and flaring in oilfields. Early Louisiana gas conservation legislation addressed the production and waste of natural gas, but mostly addressed gas wells. Rodessa Field, Louisiana, was one of the largest U.S. gas waste examples of the mid-1930s; about 203,566 MMCF was wasted in 1936 prior to regulations. Beginning in 1936, oil producers were required to state whether gas was produced with oil, and if so, the gas amount and its disposition. For 1937, reported casinghead gas produced in north Louisiana was 17,331 MMCF, while south Louisiana production was 38,530 MMCF. A 1939 federal study of state records documented that 53% of Louisiana oil producers failed to complete associated gas reporting requirements. Reported casinghead gas produced in 1941 from north Louisiana was 65,987 MMCF and from south Louisiana was 133,664 MMCF. A 1939 survey indicated that 50 out of 79 south Louisiana oil fields vented and flared associated gas. A 1944 study by the Conservation office calculated that casinghead gas production based on gas: oil ratios was 64% higher that reported operator records to date. The department estimated that about 60%, or 1,236,000 MMCF (1.236 TCF) of associated gas had been being wasted through 1944. Reported gas venting and flaring from south Louisiana oil fields in 1952 was 106,501 MMCF and in 1958 was 98,923 MMCF, about 94% of all Louisiana venting/flaring. Gas wastage in south Louisiana increased with continued field discoveries on the LA shelf and in federal waters. Louisiana began a steady decline in vented and flared gas from 1968 (166,439 MMCF) to 1974 (31,572 MMCF).

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